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(21) International Application Number: PCT/IT99/00226 (22) International Filing Date: 19 July 1999 (19.07.99) (30) Priority Data: RM98A000478 17 July 1998 (17.07.98) IT (71) Applicant (for all designated States except US): PLANTECHNO SRL [IT/IT]; Via Staffolo, 60, I-26040 Vicomoscato (IT). (72) Inventor; and (75) Inventor/Applicant (for US only): FOGHER, Corrado [IT/IT]; Via Ticino, 32, I-26041 Casalmaggiore (IT). (74) Agents: LEONE, Mario et al.; Società Italiana Brevetti S.p.A., Piazza di Pietra, 39, I-00186 Roma (IT).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> <i>In English translation (filed in Italian).</i>	
(54) Title: A SYNTHETIC POLYNUCLEOTIDE CODING FOR HUMAN LACTOFERRIN, VECTORS, CELLS AND TRANSGENIC PLANTS CONTAINING IT			
<div style="text-align: center;"> </div>			
(57) Abstract A synthetic polynucleotide encoding human lactoferrin, modified with respect to the natural gene so as to maximize its expression in vegetals, on the basis of the preferential use of the codons is described. Moreover, the vectors containing such sequence, that having regulation elements activated in a controlled way determine its tissue- and stage-specific expression are further described. The vegetal cells and the plants transformed with the afore mentioned vectors, as well as the production processes of functional foods, vegetal milks, and human lactoferrin, utilizing them are also described.			

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